

AMERICAN FARMER.

RURAL ECONOMY, INTERNAL IMPROVEMENTS, PRICES CURRENT.

*"O fortunatos nimium sua si bona norint
"Agricolas." . . . VIRG.*

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AGRICULTURAL.

ON THE

Cultivation of Fiorin Grass.

By Dr. Richardson, D. D. Clonfleckle, Moy, Ireland.

It is with great satisfaction I have the honour of submitting to the society a paper on the cultivation of fiorin, by Dr. Richardson:

Was further corroboration necessary to prove the advantages likely to result from the cultivation of this valuable grass, I might adduce the testimony of the gentlemen deputed by the Agricultural Society of the stewartry of Kirkcudbright and Wigton, to visit Dr. Richardson's farm. The report of E. Boyd, Esq. of Merton-Hall, and J. McCulloch, Esq. of Ardwell, confirm every statement made by Dr. Richardson; and place the benefits likely to result from the fiorin, even higher than he has done. Mr. Boyd in a letter I had the honour of receiving from him, says, "I think the quantity upon one meadow, was six times as much as I ever saw upon the same space of ground." States the hay to be of the best quality; and holds out the most flattering hopes of its answering for cutting green for winter soiling.—Dr. Richardson's indefatigable exertions in bringing the cultivation of fiorin to the perfection he has done, on all kinds of soil, even where peats have been cut, will form a new era in agriculture. What the turnip does for light soils, the fiorin will do for strong. Manure is the basis of all systems of farming: An acre of fiorin may be estimated from 5 to 10 tons and capable of making from ten to twenty tons of manure, supposing it only to double its own weight.

The obligations due Dr. Richardson from his country, are GREAT. No encomium in my power to bestow, can do him JUSTICE. In offering to him my warm and grateful thanks, though they fail in conveying any adequate idea of what I conceive and feel to be his due for the benefit he has rendered to agriculture, will I trust, be received as a proof of the esteem and respect I entertain for HIM.

SIR,

When I was treated in so kind and flattering a manner at Workington, my gratitude burst out into a promise, that I would teach your most respectable society to convert the worst acre in CUMBERLAND (except in extreme cases) into meadow, that should produce crops of hay superior both in quantity and quality, to any now growing on your very best.

The flattering confidence you yourself were so good as to say you placed in me, abated much of the surprise my extravagant promise might otherwise have excited.

And in the delightful, and extensive tour, in which I had the honour to accompany you, opportunities were perpetually occurring of discussing the practicability of reclaiming varieties of ground mostly wet peaty moor, and now in a state completely unproductive.

I believe I convinced you of the practicability and facility of converting every such barren tract, into fiorin meadow, of great value, and of all descriptions of ground, PEATY MOOR is the most rapidly brought into profit, and at the least expense.

Happily too in a course of between 200, and 300 miles through Cumberland and Scotland, peaty moor was almost the exclusive description of all waste grounds.

I well recollect our discussing the subject as we no competitors; these moors and cut out moss, are to

pass SOLWAY MOSS, and my pledging myself that the cleanest stiles of ground I have cultivated nor in I would reclaim so much of it as we saw from the upon, and I must add, have produced crops of the road at an expense which should be repaid by the greatest luxuriance

sale of two crops of its hay; leaving FOR EVER a better meadow than any now in Cumberland.

The rapidity of the change will be best understood by the following fact, upon which I have laboured to

bring much attention.

On the 20th of April, 1811, I began to cut my turf on ground less favourably circumstanced than the parts we saw of Solway Moss; having previously shown the ground to different persons explaining my intentions, and expectations.

I laid down this ground with fiorin, roots, and strings, April 24th, without soil or compost, manuring it only with ashes burned contiguous.

Late in October, I mowed this piece in the presence of Sir James Stewart f Coltness, of our friends Mr. Boyd, Merton-Hall, Mr. McCulloch, of Ardwell, with other gentlemen, and I have their authority for saying, that the crop seemed to be treble what they had ever seen mowed from so much ground admitting at the same time that it was unfit for any other culture.

It is not for me to talk of the quantity of such MOOR extended over the face of CUMBERLAND, WESTMORELAND, DUMFRIES, and GALLO-WAY, it is a fact of too much notoriety, and long a subject of complaint; it is my duty to show how these dreary and barren wastes, may be made productive, how the useless heath may be made to give place to the most luxuriant of grasses.

I shall commence with some general maxim necessarily to be observed in the laying down and cultivation of fiorin. First the ground must be kept in a medium between wet, and dry, easily effected by frequency of small drains; shallow (that is 12 or 14 inches,) where drought is apprehended, and then they are to be stopped by little dams, as the dry season approaches—deeper where the moor is wet, and much water to be discharged.

Above all, stagnation of moisture is to be guarded against, as most injurious to vegetation, but no redundancy is mischievous, if of short duration; you must remember the great deficiency of crop in the moist parts of the fiorin meadow of a friend (otherwise well laid down) but in which the drains were not made so frequent as I had ordered.

The fact is beyond doubt; but the philosophical principles upon which the injury of vegetables from torpid moisture depends, I never understood, until in company with you, I heard them clearly explained by an eminent Cumberland personage, then our host, perhaps the only scientific botanist I ever met with, who was not led astray by Linnean folly. I need not say I mean that great and valuable dignitary of the church of Carlisle.

The next general maxim to be attended to in the cultivation of fiorin, is that this vegetable must have exclusive possession of the ground; no mixture of other grasses, nor a weed suffered to interfere with it, every prior occupant must be exterminated in the preparation of the surface, every weed pulled up as it appears, and every other grass taken up by the roots in MAY and JUNE when they show their species by their panicles.

Weeding (and especially for the first year) is a heavy task in warm arable grounds, and deep moist bottoms; where for want of fall it is difficult to discharge the waters; but in barren moors to which I am particularly anxious to call the attention of our Cumberland, and Scotch friends, the fiorin will have

The wet MOORS, are much more favourable a soil for fiorin, than the more SPUNGY FIBROUS PEAT Moss; the latter must be consolidated by an admixture of firmer earth, while the moory soil is sufficiently solid of itself, and so rich as to give tolerable crops without any manure; but where ashes are so easily acquired, who would decline to procure on light terms, a manure which we know forces fiorin in luxuriance to a maximum.

When preparing the moory ground for a crop of fiorin it must be made level, and completely RAW, every vegetable exterminated, and it must be opened or loosened, to the depth of at least ten inches.

I may be asked, why prepare the soil to such depth, for a vegetable, whose roots scarcely penetrate one inch; I confess the superior luxuriance of fiorin in deep soils, has often embarrassed me; you first solved the difficulty to me, by satisfying me that the evaporation of the earth was a most powerful agent, and stimulator of vegetation, of course where the earth was hard bound up, immediately beneath the roots, evaporation was impossible and that powerful stimulus intercepted.

How clearly did our scientific host the venerable Bishop of Landaff explain this new principle of nature discovered by himself?

In the preparation of our ground for fiorin we must avail ourselves of this principle, without losing sight of the peculiarity of our vegetable, whose roots penetrate so short a way into the ground;—on the former account we must till DEEP; and on the latter we must keep our manure better up to the surface, than in the culture of any other vegetable.

The Scotch and English understand every species of tillage so much better than we do, that I shall not presume to discuss PRACTICES with them, I shall confine myself to PRINCIPLES.

When told *haring* and *burning*, must be an admirable stile of preparation for fiorin, I reply are you sure you till deep enough? and that your plough does not bury your ashes below the roots of the vegetable you wish there to stimulate into action?

With a view to the latter object, my process is as follows—having tilled the ground to the proper depth, in the easiest manner its circumstances will admit; I spread HALF my manure, be it ashes or compost, over the level surface, and then with a harrow if it will bear it, if not with a spade, paint in and mix this manure with the upper soil, to the depth of an inch and a half, thus enriching the Matrix, to be occupied by the roots of the vegetables.

I then scatter my fiorin strings, no matter whether cut or not on the surface, and spread the remainder of my manure over them, to which if not sufficient to nearly cover them, I add as much of the surface soil as is necessary; the business is now done, protection from external trespassers, and rival weeds, and grasses within, alone remain.

Before I proceed to detail the mode of saving the crop when ripe, and to name the period at which I recommend fiorin meadows to be mowed, I must state the probable value of the crop, that by the promise of enormous quantity I may rouse attention to the measures I recommend which might not be encountered under moderate expectations.

You, sir, with probably the same feeling, having satisfied yourself of the immensity of fiorin produce, by examining and weighing the luxuriant fiorin crops of your friend Genl. Dirom, at ANNAN; and wishing to impress the same conviction upon others wrote to

me to ascertain the precise amount of an acre of fiorin, both fresh mowed, and completely dry for storage. I rejoiced at the call, and though I had in three former seasons ascertained by unexceptionable witnesses the amount of an English acre of dry hay, to be six, seven, and eight tons; I repeated the same trial, and mowed on September 16th, the twentieth part of an acre.

To the weight when fresh cut I annex little importance, circumstances must vary it so much, but the weight of the hay when dry, and fit for house or rick is the test;

As I was setting out to Workington I was obliged to commit the charge of weighing (when dry) to a military friend, high in rank; his report reached us at Dumfries, and with the other authentic documents on the subject, is deposited among the records of the Agricultural Society of the stewartry of Kirkcudbright; they established the weight of the crop mowed by your desire, to exceed eight tons and one quarter, to the English acre; when perfectly dry (my friends phrase.)

This is the fourth time the immense amount of fiorin crops has been established in as many separate seasons. The great difference in value of the crops of fiorin, and other grasses, the latter seldom far exceeding two tons; will I expect secure attention to my statement of the natural history of the two descriptions, fiorin and common grass; with the essential difference between them, upon which such opposite results depend.

Every variety of grass of which we have hitherto been used to make hay, gives us two different productions, the leaf and the stalk (culmus); this latter contains the whole seminal apparatus, is the part we preserve as hay, comes to its perfection in its inflorescence, and should be mowed then, or very shortly after.

But in all our grasses hitherto saved for hay, as with most other vegetables, the life is indissolubly connected with the root, so that the produce when severed becomes dead inanimate matter, and like all other vegetable and animal substance when deprived of life hastens to putrefaction through the usual process of fermentation.

When then we wish to preserve this substance for use, our process is obvious; we give it as much surface as we can, exposing it both to sun, and wind, to evaporate, not only the atmospheric moisture it may have acquired from rain, and by which fermentation is encouraged; but also its own crude, aqueous juices, which stimulate to fermentation still more.

When by stirring, and exposure for a sufficient time, we get entirely rid of the former, and as much of the latter as we consider dangerous; we venture to accumulate for store and call it hay.

Such are the principles, and the practice founded upon them, by which we have hitherto been used to convert our grassy produce into winter provender.

Let us now examine the vegetable substance which I have brought forward into notice and recommend to be substituted in the place of the hay, we at present use, as possessing infinite advantage over it, and productive of the greatest benefit, to the consumer, to the landholder, and above all to the state itself.

I have said that the only produce of the grasses with which we are acquainted is the stalk, and leaf. Nature endows the *agrostis stolonifera* (our fiorin) with a third species of produce, different from, and totally unlike the former; in its periods of growth; in its habits—and still more in its valuable properties.

This grass producing leaves, stalks, and seed, like the rest of its tribe, as June is advanced begins to exhibit its own characteristic marks, and to project shoots, which creeping along the ground, and vegetating without interruption, acquire great length, and from their number and length accumulate into a fleece, or mass of grass, far superior in quantity to any crop ever produced by any other of the grassy tribe.

I first brought serious attention on this after produce of the *Agrostis stolonifera*, these long strings, by botanists called *Stolones*; and neglecting the leaves,

and stalks; collected and saved by itself for use, this new vegetable material, and with great diligence investigated its nature, and traced the singular properties by which it differs so essentially from the produce of all other grasses.

The first and most important is that in these *Stolones* the principle of vegetable life, independent of, and unconnected, with the root, as in the others, pervades the whole stalk, or string, animates all its parts equally, and undisturbed by the scythe, pervades the dry, and even housed hay, for many months.

I have elsewhere stated the pains General Trotter and I took to ascertain this point, bringing from the cock in the field, and at the same time from my hay loft, fiorin strings, and trying them in my hot house, where they always vegetated;—from December to the beginning of May; then the principle of life seemed to be extinguished; and now the same little cock which had braved the winter rains began to fust, and with the first June rains rotted and was thrown to the dunghill.

This retention of the principle of life, discovers itself in practice, without the trouble of experiments for when our tramp-cocks, or shake-cocks, stand long in the field the ropes that hold them tight, like the bands of our sheaves of corn in a bad harvest, all vegetate.

The next remarkable property by which fiorin differs from common grass, is the uninterrupted vegetation of these *Stolones*, which never stop lengthening their string; that is to increase, the quantity of their produce; the eye is sufficient to establish the luxuriant growth of every fiorin acre I have standing through this wet November; and two years ago I was able to ascertain that the *Stolones* were vegetating and lengthening through February, and an unusually deep snow, and in severe frost.

This perpetual vegetation from the middle of June, should reconcile sceptics to the immense difference between fiorin crops, and those of common hay, when they know, that the period in which the grasses that form the latter, vegetate with strength, and increase their quantity, rarely exceeds seven weeks.

From the time the crops of common grass attain their perfection, they begin to fall off, the stalks become lignous, the leaves collapse, and rot; here the farmer has no option; he must mow his hay crop when ripe.

With fiorin the case is quite different, for consisting of animated *Stolones*, which never abate in quality, the crops may be mowed, and afford excellent hay from the beginning of September, to the end of April; and in every week in that period, I have mowed fiorin of the same quality, and saved it with ease.

But though this strange measure succeeds in small quantities, I do not say it would suit practice in a great scale; besides, we require to have our winter provisions ready for use when wanted.

When then should fiorin crops be mowed? that is, how long can we venture to avail ourselves of their increase of quantity, without exposing ourselves to the danger of having more green hay on our hands than we can manage in the short days and rainy weather, we have reason to expect?

I reply, through the whole month of October if the crop be large, and the latter half, if it be moderate, or small;—as in the making of this fiorin into hay, much of it must be thrown into November, a season in which the hay, that we are acquainted with can scarcely be saved; the prudence of so late mowing has been questioned.

But here the principle of life peculiar to fiorin, *Stolones*, comes into our aid, and enables us to save hay composed of them, with more ease, and certainty, than common hay is saved in summer.

Eminent philosophers (as I have stated elsewhere) prove that the principle of life, irresistibly counteracts both, putrefaction, and evaporation; hence wet, that so much contributes to rot common hay, is to fiorin quite innocent; Mr. Miller of Dalswinton, and I separately, made the experiment; he steeped

some, of his fiorin eleven days, and I sunk mine at the bottom of my pond for thirteen, neither of these parcels sustained the slightest injury, nor, when again dried, was the predilection of cattle for them in the least abated.

I had small lap cocks perhaps twelve pounds weight, which stood in my field neglected, and untouched for four months last winter, the wettest season remembered, yet they did not sustain any damage, and for four years past I have had hay in the common course of making, in the field, every day from October 1st, to March, and numbers coming to witness the strange process.

Let me not be misunderstood to recommend such extremes, it is the duty of the experimentalist to try powers to the utmost; while the cautious practical farmer, avails himself of his experience exactly so far as is prudent and no farther.

I recommend fiorin hay to be mowed in October a period so late, as to give good time for the *Stolones* to lengthen, yet sufficiently early to save the crop with ease, and to have it ready for use when wanted.

I proceed as follows; I shake out my sward the day it is mowed and roll it up into lap cocks, damp as it may be;—I am not afraid of atmospheric water, while in the field, but my great object is to get rid of it, that I may be able to accumulate, as notwithstanding the antiseptic powers of fiorin, a quantity pressed together, and stored wet, would certainly spoil.

My lap cocks remain untouched for a week, I then seize the first dry moment, go round them, turn the damp side to the wind, and gently raising them up so as to loosen them that the air may penetrate, an hour afterwards, I go round them again and turn them over with the point of a stick, exposing their basis to the wind.

In another hour, I go round them again, lighten them up, make the base as narrow as I can, and keep any hay that may be wet on the top.

When they have stood another week, I repeat the same process, never breaking up a lap cock.

After three or four days, I put them into shake cocks, that is, I accumulate as many together as can be heaped up without treading, and hold them tight by a rope or two.

When they shall have stood thus for a week the hay is quite fit for use, but as the quantity probably far exceeds the immediate demand, it will be prudent to accumulate these into common tramp cocks of 15 or 10 hundred weight, which may stand in the field through the winter, ready for use as wanted.

I shall be told these cocks will be spoiled by the severity of winter weather, no doubt common hay would, but the animation of the material of which their surface is composed, protects fiorin both from putrefaction, and evaporation; and we find the whole mass equally fit for use, when in tramp cocks of common hay, much of the outside coating, must be thrown away, spoiled and rotted by long exposure.

I proceed now to another description of ground, still more favourable to fiorin culture, and more extensive, at least in Scotland and Ireland, wet peaty mountain.

I say more favourable, because the declivities make drainage a matter of great facility: and the skirts of the mountains where improvement will necessarily commence, must be all capable of irrigation from the commanding upper rills; and of all grasses fiorin is most improved by irrigation.

In the transactions of the agricultural society of the stewartry of Kirkcudbright, (copies of which were in so flattering a manner presented to you, and to me) I find a very intelligent memoir by one of their vice Presidents, Mr. Mure.

This gentleman dividing his country into three districts determined by their respective elevations; of the highest, or mountain districts says, "But the greater part of the (mountain) moors must be limited to the breeding of sheep, and young cattle, and of grazing highland cattle; want of tillage and meadow ground, and consequently of fodder limits greatly the breeding of cattle,"

What will Mr. Mure say to the introduction of a style of culture into his mountain moors, to which it has been objected that the immense quantities of hay it would produce could not find a vent.

The objection was made to Mr. Miller of Dalswinton who was preparing for flax, tracts of mountain moor to an extent I dare not mention; he was asked how will you dispose of the hay? my good old friend replied, *I shall send it to market on its legs.*

It will be doubted, that flax will vegetate in Alpine climates, where other culture is given up as desperate. I reply that where a vegetable thrives spontaneously it may also be cultivated.

That this hardy grass does grow spontaneously on our highest mountains, is a question of fact, for the truth of which you heard me call for the testimony of the noble president of the society of the stewartry of Kirkcudbright.

I addressed the Earl of Selkirk in his chair, and asked him if he had not, at my request, gone to the summit of Knockland Mountain to look for flax, and if he had not found it there in abundance; The height above the sea 1660 feet.

I was then speculating a priori; but now the fact is established by the luxuriance of the flax I planted far up on the Marquis of Abercorn's mountain, and still more by the extensive meadow laid down yet higher on the Marquis of Hertford's wet and peaty mountain above Belfast.

[TO BE CONTINUED.]

Treatise on Smut in Wheat.

THE EARL OF CHESTERFIELD

Has ordered, that copies of the following Extract from the Farmer's Journal, should be distributed amongst the Tenantry on His Lordship's Estate. And should they have any communications to make on the subject, they are requested to address their letters to MR. BLAIE, and enclose them to the earl of CHESTERFIELD, at Bradby Hall, near Burton-upon-Trent.

EXTRACT FROM THE FARMER'S JOURNAL OF THE 2d OF SEPTEMBER, 1811.

To the editor of the *Farmer's Journal*.

SIR,—I venture to address you on a subject interesting to most Agriculturists, and I may say of great importance to the community at large, namely, the disease in Wheat called Smut, Bunts, Blabs, &c. Should you think the following observations worthy of a place in your Journal, you are at liberty to make use of them for that purpose.

As the Wheat seed-time is now approaching, I consider it a matter of great importance, that every farmer should use proper precautions against the probability of his having any portion of Smut amongst his Wheat crops, in the produce of the following year.

I am aware that many agriculturists will think it presumptuous in me (so little qualified) to attempt to give information or instruction on these subjects; others will scoff and say, there is nothing new advanced, and that they have long been fully acquainted with both the theory and the practice.

But as my views are clearly disinterested, and I will even say, patriotic, I shall not be deterred from venturing to communicate my ideas on this very important subject; being in hope that (should you deem the treatise worthy of a place in your Journal) it may attract the eye and command the attention of some farmers of different descriptions from those I have before mentioned. Should that be the case, I shall feel satisfied, and fully compensated in the hope that the country will be ultimately benefited by a more general adoption of the rules here laid down.

As an introduction I shall first state, that being fully convinced, by a series of experiments made upon this farm (Bradby, in the county of Derby,) carried on under the patronage of the Earl of Chesterfield, (whom I have the honour to serve in the capacity of Bailiff,) I have no hesitation in stating my opinion to be, that the Smut in Wheat is a contagious disease, the nature of which being foreign to

the pursuits of the practical Farmer, can be best explained by the Naturalist. It is sufficient for the Agriculturist to be convinced that the disease is highly infectious, and that it is, in many instances but too easily communicated to the seed, in which state the inoculation is effected.

To prove the foregoing assertion, any person having doubts, may try the effect of inoculation on a small scale by means of the following simple process. Take a few handfuls of perfectly clean wheat, wash it well in pure water, and on some spot in the farm garden, or other convenient place, sow one half of the Wheat in its clean washed state; then take a portion of the fine black dust of Smut, and with it inoculate the remaining half of the washed Wheat. This may be done by putting the smut dust and washed Wheat together into a small bag, and shaking them well. Let the Wheat remain in the bag a day or two, or more, till it is dry, and afterwards sow it on a convenient spot of ground, at a distance from the other part previously sown. The result will certainly prove satisfactory by the produce in the following season.

When a farmer becomes convinced of the infectious nature of the disease, the most desirable purpose has been effected, for he will ever after be careful to avoid infection.

The disease is frequently communicated by various insidious means, seldom sufficiently attended to, such as—by putting pure Wheat into foul sacks—by spreading it on a barn floor where smutted wheat had previously been thrashed—by the means of thrashing and winnowing machines, &c. &c. The infection is also not unfrequently carried from the barn door where smutted wheat had been winnowed, the dung being removed from thence and laid in a green state upon land intended to be sown with Wheat.

Although according to the theory I now advance, viz. where there has been no infection communicated to the seed, there will be no Smut in the produce; and however strict a farmer may be in adhering to this system, and of course cautious in guarding against infection, yet I do not advise him to trust to caution alone as a safe preventive; for, as I have before observed, the infection is frequently conveyed in the most insidious manner, so that it is almost impossible to be sufficiently guarded against it, without the aid of washes, styptics, &c. &c. and I strongly recommended a proper attention to their application in the manner hereafter treated of.

It has long been an established practice amongst intelligent and unprejudiced farmers, to be very careful, not only in the selection of Wheat for seed, but also in attending to well washing, brining, steeping, or otherwise preparing the seed, for its being deposited in the ground, being satisfied from perhaps dear-bought experience, that on the proper execution of the process of pickling, depends their safety against the probability of having Smut amongst their following Wheat crops.

I am sorry to say, there still remain a few pretended Agriculturists, perversely and obstinately attached to opinions they have formed on the nature of the disease, such as—that it is occasioned by the state of the weather,—by the situation of the land—by the nature of the soil—and by various other causes, equally erroneous and absurd. To such men I strongly recommend to try the effect of inoculation in the simple manner I have before described.

Another class of farmers are convinced by experience, that smutted seed will produce smutted crops, and are therefore more careful in the selection of Wheat for seed, which they frequently sow in the same state in which it is bought; consequently, not unfrequently disappointed in the produce, not being aware of the infectious nature of the disease; or that even highly infected seed may be (by the proper use of applications) made to produce clean crops. Such, however, is the fact.

On some farms, the occupiers take little or no trouble about preparing the Wheat seed, but continue to sow the same produce, without change, for

a number of years in succession, yet are never troubled with Smut. Such instances are in corroboration of my assertion, that if there has been no infection, there will be no disease; and is also in favour of an opinion which I now advance. That with proper attention the disease may, in a very few years, be totally eradicated.

Since the advance in the price of salt, the expense of good brine or pickle, has become of much consideration to farmers, and in consequence, various substitutes have been adopted, which have frequently proved ineffectual.

In attempting to give directions for this necessary operation, I recommend, that previous to all other applications, the Wheat should be well washed in pure water. This process is performed with facility by means of close wicker baskets, in which the Wheat may be put, and immersed in running water, or in tubs, cisterns, &c.; but what ever method is used, let the Wheat be well stirred up, shook about, and the refuse skimmed off. The pickle or brine may be made of coarse salt and clear water, sufficiently strong to carry a new laid egg. The wheat after being well washed, must be put into the pickle, and the quantity proportioned to the size of the vessel, so that the Wheat is completely covered by the pickle; let it be stirred up several times, and all refuse skimmed off. The wheat should remain in the pickle from six to twelve, or more hours.—The pickle must then be drained off and with the addition of a little fresh salt, will be ready for the next steeping. When the wheat is taken out of the pickle, it should be spread over a barn, or other floor to dry; and here it may be necessary to remark, that where there is any danger of infection from the floor, it should previously be dusted over with quick lime, well swept into the crevices of the floor. After the Wheat is taken out of the pickling tub, and laid on the floor, it should be well dusted over and mixed with quick, or caustic lime; and if turned over by a shovel, or stirred about by the teeth of a rake, it will dry faster and be sooner ready for sowing; and if run through a Barley or Oat riddle, it will separate better as it is sown. Should the weather prove unfavourable at the time, the seed will not take injury from being pickled, should it not be sown for a fortnight afterwards, provided it is spread thin on a dry floor, and turned occasionally.

Another method of pickling is sometimes practised with success, by immersing the wheat into, or sprinkling it over with stale chamber-ley, and afterwards dusting it over with quick lime; but this method, although much cheaper, is not so advisable as the former; because, by the latter method, the operation is frequently not performed effectually, there being much danger of the seed being injured by the strength of the chamber-ley. So also the Wheat pickled in this manner must be sown immediately after it is dressed, be the state of the weather what it may; for if kept out of the ground for a time it would be perished, that is, its vegetative powers would be destroyed; whereas, by the former method no such danger is to be apprehended, and is therefore to be particularly recommended where drill husbandry is practised; as the seed may remain with safety till it is quite dry, before it is sown, which will prevent its clogging in the seed-cups, it being liable to do so, if sown when wet.

Many other methods of preparing seed Wheat are practised, and many ridiculous nostrums are made use of for that purpose, one of which cannot be too severely reprobated, that is, the use of solutions of arsenic, a very dangerous expedient and ought to be discontinued.

I shall now, Sir, commit the foregoing observations into your hands, leaving it to your discretion to make such use of them as you may think proper. I subscribe myself,

Your humble Servant.

FRANCIS BLAIE.

Bradby Hall, near Burton-upon-Trent, Aug. 27th, 1811.

Kitchen Garden for November.

From the American Practical Gardener, published by Fielding Lucas, Jr

[Continued from No. 33—p. 264.]

FRUIT GARDEN, FOR NOVEMBER.

Raspberries.

The red and white Antwerp raspberries are excellent fruit, but less hardy than the other varieties; it will, therefore, be necessary in the eastern and middle states, to lay down the shoots of the present season, immediately previous to the severe frosts, first cutting off close to the ground, the shoots which bore fruit the preceding summer. The superfluous, weakly shoots may likewise be cut off, and also the straggling tops, or they may have a general and final pruning.

Then dig the earth between the rows, and add some very rotten manure, after which, being provided with some hooked wooden pegs, and a number of long pliant hoop poles, lay down each row of shoots, gently on one side, on these lay the poles lengthwise of the rows, pegging them down with the hooks, so as to keep the shoots close to the earth; after which cover all over with light litter of any sort, in order to protect the plants from the effect of the various changes of the weather, as well as from frost. Here they will remain safe till the beginning of March, when the litter is to be taken off, the plants raised up, and the ground receive its spring dressing.

ORCHARD, FOR NOVEMBER.

Planting and Choice of Situation, &c.

This being the most suitable season for planting out fruit trees of all kinds, after remarking that the soil should always be a dry rich loam, the observations made in January and February are referred to.

Apples, pears, quinces, plums, cherries, peaches, nectarines, apricots, and almonds, may now be planted; also, walnuts, chestnuts, filberts, persimmons, medlars, berberries, and every other kind of hardy fruit trees.

Pruning.

You may now commence the pruning of all fruit trees, except stone fruit, as there is more time at this season than in the spring; but if it was not for the pressure of business, the spring would be preferable for all; the stone fruit must be omitted pruning till then.

NURSERY, FOR NOVEMBER.

General Observations.

Continue to dig and trench the ground, to forward the business for spring.

Where it is necessary to manure any part, it should be carried and spread over the ground, previous to digging. This season will be more suitable to perform this work, than at the time of planting.

Protecting Seedlings and young Plants.

All seedlings, that are rather tender, should have hoop arches over the beds, and at the time of severe frosts, thick mats, &c. placed on them, in order to protect the plants.

Every kind of hardy plants in pots, should now be removed to places where they may have sufficient protection in severe weather; for if fully exposed to the frost, the plants will be injured, and the pots broken by it.

When hardy and exotic plants are set out in large pots, these may be plunged to their rims, in a warm border, and covered six inches deep over their edges, with tanner's bark, &c. which will considerably preserve their roots.

The more curious kinds of evergreens, and other plants in pots, should be removed into the greenhouse, or under garden frames, with glasses or other covering.

Care of new planted Trees.

Tie up all new planted trees to stakes, especially those which may be exposed to the winds.

Lay some light litter over the roots of the more tender kind of trees and shrubs, to protect them, in some measure, from frost.

Pruning Trees and Shrubs.

Hardy forest, ornamental trees or flowering shrubs, &c. may now be brought to their proper form by cutting off the straggling branches, and trimming up the stems of such as require it; but the more tender sorts should not be pruned till spring.

SHEEP.

A simple Contrivance for feeding Sheep.

This contrivance is denominated a *tumbril*; it consists of a circular cage or crib, which may be made of osiers, willows, or other pliant brushwood. The whole is about ten feet in circumference, and closely wattled to the height of about one foot, above which it is left open for the space of eighteen inches; it is then wattled again to the height of eight or ten inches, and an opening about eighteen inches in breadth is left at the top for putting in the roots or other food, whether green or dry. The staves which form the skeleton of this utensil are ten inches asunder, so that twelve sheep may feed at the same time in each tumbril.*



Considerable benefit may be derived from the adoption of the simple contrivance above represented for the purpose of feeding sheep; for it not only effects a material reduction in the consumption and expense of provender, which is thus prevented from being trodden under foot, or soiled with dung; but also, in this state of separation, the stronger sheep cannot drive away the weaker, as each is secured by the head. Besides, as the construction of such a tumbril is attended with no difficulty, it may be easily procured, and conveyed to any part of the farm; and, with due care, may be kept in constant use for eight or ten years.†

* "Repertory of Arts and Manufactures," Vol. IV. first series.

† This tumbril, so simple and easy of construction, would be found useful in the facility with which it may be moved, and set down for any given time on poor galled spots in the field.

The manure dropped about it, would restore these spots to the common level of fertility, and thereby cure these offensive *eye-sores*, so disgusting in the view of all thrifty farmers. A practice observed by Mr. Ward, of Cecil, in the management of sheep, may here be appropriately introduced. It is copied from the Editor's note book, dated November, 1814.

"Mr. Ward, of Cecil, has 136 sheep, which in winter he feeds on *wheat straw, salted*, say half bushel of salt to 100 bushels of straw, given to the above with half a bushel of corn 3 times a week—sheared 44 lambs 1st July, product 112½ pounds wool—sold to the batters at 80 cts. per pound—thinks they wintered as well as those not sheared, and that the quality of the subsequent fleece was improved—sprinkles salt on poor spots, sheep in resorting there, manure them—finds that they prefer lying on *naked land*." A good plan would be to plough up poor spots in a sheep pasture in summer—they will always go to such places to rest during the night.

Ed. Am. Farmer.

FROM THE NATIONAL INTELLIGENCER.

On the Grape Vine,

With its Wines, Brandies, and dried Fruits.

No. I.

No principle of action in the business and industry of the United States has been so beneficial to them as the adoption of *new objects of culture* by the planters and farmers, whose old objects of culture were likely to become redundant, and to fall in price. *Cotton* and *sugar* are well known and important examples. There are good grounds for estimating our whole cotton of our best year, (September, 1817, to September, 1818) at 42 millions of dollars, according to the price on the wharves of our sea-ports for that which was exported to foreign countries, and the price at our factories, stores, and dwellings, of that which was manufactured at home. It is now manifest that the East Indian and South American cotton greatly injure our markets; and as this arises from growing, permanent, and substantial causes, there is reason to expect the continuance of the injury to us from the foreign rival cotton-cultivation. A brief and plain view of the history and prospect of cotton, will be found in the Philadelphia edition (A. D. 1818) of *Rees' English Cyclopædia*, by Murray Bradford & Co. under the article or head of the "United States." The facts there stated, with many known subsequent circumstances, will give rise to serious reflections, in the minds of the landholder and the statesman, upon the subject of protecting the productions of our own soil. The industry of the landed men of the U. S. is manifestly and unalterably much greater than any, and than all, the other branches of our domestic or national industry. The mercantile and manufacturing branches result almost entirely from the landed industry. While, therefore, the legislative and executive governments raise revenues of 27 1-2 to 60 per cent. on a great quantity of foreign cotton cloths from India and Europe, and a higher revenue from the foreign manufactures of tobacco, and a still higher revenue from the foreign manufactures of grain, of fruit, and of the cane, to the great fundamental and convenient support of American manufactures; and while they are free to go further, if they find it right, in the joint encouragement of our agricultural and manufacturing industry it will be found beneficial to the landed interest to inquire into other means of promoting the prosperity of the *Colossus of our country*—the agricultural industry.

There can be no doubt that, between the sites of the vineyards of the Lower Schuylkill, Southwark, of Pennsylvania, Butler, of Pennsylvania, Glasgow, of Kentucky, New Vevay, of Indiana, and Harmony, of the same state, on the north, and the coasts of the Gulf of Mexico, on the south, the United States possess the climates and soils of "the vine-covered hills and gay regions of France." The sweet orange grows in safety, in groves and gardens, in the vicinity of New Orleans, at a greater distance from the sea than any place of equally safe growth, in Provence or Languedoc, of France. As our country shall be cleared and drained, our climate will be still less severe in the States on the Mexican Gulf. In the north, our climates of New Vevay and Harmony, in Indiana, Glasgow, in Kentucky, in 37 to 38 degrees 30 minutes north, which are the present northern extremes of successful experiments in the vine cultivation, are as favourable and mild as the climates of Champagne, Tokay, Lorraine, Burgundy, and Hockheim, which are fine northern regions of the vine in France and Germany. Between our New Vevay, in Indiana, and the Gulf of Mexico, the states of Louisiana, Alabama, Mississippi, Georgia, South and North Carolina, Tennessee, Indiana, and large parts of Virginia and Kentucky, must give us all the vine climates of France, Germany, Switzerland, and Upper Italy. This vine district of the United States is much larger than all those vine countries of France, Germany, Switzerland, and Upper Italy. The crop of wine and brandy in the vine country of France alone, though our vine country is more than twice the size, has been estimated at 100 millions of dollars. Let us then consider the propriety of a diligent inquiry into the cultivation of the vine, and the preparation of wines, brandies, dried fruits, and cream tartar, in the United States, in order to maintain the prosperity of the landed interest by the variety and prices of our crops.

The present duties on foreign distilled and fermented spirits and liquors, (brandy, gin, rum, arrack, wines, beer, ale and porter) and on dried fruits, though laid for revenue, afford a great and sure encouragement to the establishment and the manufacture of the grape. The demand will increase with our population, and the facility and certainty of the culture and crop will grow with the clearing and draining of our country. Ridges hills, mountains, rocky lands, any steep grounds, gravelly, stony, sandy, and other inferior lands, (if only dry) will yield profit in large crops or in fine qualities of wine, or both. Fresh and dried grapes are both favourable to health and frugality. Ripe grapes have been administered to whole regiments of troops in France, who have been ravaged by fluxes and dysenteries.* The quantity of wine computed to be produced in France is ten millions of casks, of nearly 63 gallons each, on two millions of arpents (not 2,000,000 acres) of land, often not fit for wheat, rice or tobacco, valued very low, on a medium at fifty francs the cask or French hogshead. This is three time the value of the cotton crop of the United States, on a medium value, produced in 1818 or in 1819, and demands our early and serious attention, particularly from the Gulf of Mexico to the end of the 39th degree, when the country in that degree shall be cleared and drained in its wet or marshy parts.

It has been already observed, that ridges and hills are the most suitable shape or form of country for vineyards. The most proper exposure is from south east to south. It is believed that all southern exposures will do. The propagation may be by seeds, or by cuttings or by bending and covering a part of an old vine so as to make it grow out in another place at a proper distance. The plough is of much use in the cultivation, so that care must be taken to plant the

vines at such distances as to facilitate the use of the plough and the harrow. The best grapes which can be obtained should be used, in order to put the culture forward. These may be foreign or American, native or imported. A harsh grape to the taste may produce a better wine than was expected, and more and better brandy. The finest grapes of Europe and the African isles are supposed to be native wildlings improved by culture and selection. The region of the plum and peach appears to include the region of the vine. Although the south is the proper sphere of the grape, its cultivation there will leave the bread grains, tobacco, hemp, the grasses and cattle to the more exclusive and profitable culture of the states north of the proper region of fine and abundant crops of wine. We pay annually to foreign nations a sum of money for wines, spirits, and materials to make spirits, and for fresh and dried grapes, as great as our whole specie medium. So important is this subject, in various points of view, to all the states, that it is respectfully recommended to the superintendents of all our public, agricultural and philosophical libraries, to procure all the treatises on the culture of vines and making of grapes which are to be found in the languages of France, Germany, Spain, Italy, and great Britain.

A Friend to the National Industry.

Philadelphia, Nov. 1. 1819.

Note by the editor of the American Farmer.

It is to be regretted, that more general attention has not hitherto been paid to the keeping of accurate meteorological tables; if it were for no other purpose than to save cultivators from engaging in many expensive experiments which theorists have induced them undertake by confounding one climate, and the course of husbandry of one country with another—merely because, on an inspection of the map, they happen to lie in the same latitude. The city of Baltimore is in lat. 39° 20' north. The city of Seville, in Spain, is in lat. 37° 32'. These cities are situated about a similar distance from the ocean. At Baltimore the winters are remarkably severe; with every precaution the fig, as a shrub, can scarcely be preserved from destruction by the intense cold. The neighbourhood of Seville, is alike famous for its olives, Oranges and Xeres, or sherry wine; indeed, is only surpassed by the West Indies in the growth of the sugar cane.

The Islands of Great Britain and Ireland are situated in about the same parallel of latitude as Newfoundland. The European Islands are susceptible of the highest agricultural improvement, and are literally cultivated like a garden, while the American Island, has been abandoned as being too bleak, cold, and wholly unsuited for habitation.

We are told by philosophers, that the mean temperature below which particular productions cannot be cultivated with success.

FARENHEIT
Deg. Min. Sec

Vineyards yield Wine	43	52	30
Olive trees	55	37	30
Orange trees	62	22	30
Coffee	64	37	30
Sugar canes	68	00	00

The mean temperature of our climate at Baltimore as noted by a very accurate observer, was in the year 1817, which was unusually chill and wet 52° 4'.

Extract from Captain Lewis Brantz's Summary of Meteorological observations near Baltimore, for the years 1817 and 1818.

MONTHS.	YEAR 1817.			YEAR 1818.		
	Faren- heit's Ther.	Water fall'n. inches	1 10th.	Faren- heit's Ther.	Water fall'n. inches	1 10th.
January,	28° $\frac{1}{4}$	22	1-2	31° $\frac{1}{2}$	—	9
February,	27 $\frac{1}{4}$	2	8	28	2	—
March,	40 $\frac{1}{2}$	4	2 1-2	29	3	—
April,	58 $\frac{1}{4}$	12	1-2	46 $\frac{1}{2}$	2	1
May,	59 —	2	6	57 —	6	4 $\frac{1}{2}$
June,	69 —	9	1	71 —	1	1 $\frac{1}{2}$
July,	74 $\frac{1}{2}$	3	5	76 $\frac{1}{2}$	4	1
August,	71 $\frac{1}{2}$	10	4	73 —	—	—
September	65 —	3	3	63	3	2
October,	52 $\frac{1}{4}$	1	8	53	1	1
November,	46 $\frac{1}{2}$	3	7	45 —	2	—
December	34 —	3	6	9 $\frac{1}{2}$	2	6
mean of the year:	48 $\frac{1}{2}$	1-2	—	mean temp. 52° 1-4	32	6
	inches water.			50 1-6	Water fallen.	

Greatest cold in the year 1817—15th. Feb. at sunrise, 4° below 0—and the greatest heat 30th July, 92°. Greatest cold in the year 1818—10th Feb. at sunrise, 2° below 0 and the greatest heat 12th July, 94°.

It is worthy of observation, that although the summer of 1818 was remarked as unusually warm, the mean temperature of this year is 2° lower than 1817. This arises from the circumstance of the first five months being unusually cold: the heat commenced towards the end of June, but then it continued uniform until the end of August, and in December, it was severely cold.

From the Albany Argus.

MR. BUEL.—It may be acceptable to many of your readers who are in the habit of collecting and preserving medicinal plants, or 'roots and herbs' for family use, and for sale, to be advised of the most proper manner and time of selecting and collecting them. So many of them enter the shops of the druggists, and become a necessary and valuable prescription under the direction of the physicians, it is of importance that every species should have its similar quality in a similar degree. Many a vegetable medicine has lost its reputation in the hands of scientific physicians from repeated disappointments in its efficacy, because it was gathered out of its proper season. I have therefore, selected the following directions:

Vegetables should be collected in places where they are indigenous, and in soils and situations where they naturally flourish with the greatest luxuriance. The decayed part should be separated, and on drying the sound portion, care should be taken to prevent the dissipation of volatile parts; and during the time of keeping them, the access of insects or impurities. Annual roots are in the greatest perfection just before their shoots spring forth, and biennial ones in the spring of the second year: in the autumn of the first, their virtue is not greatly inferior, but there is no danger of gathering the degenerate root, hastening to decay, by mistaking the second for the first year.

Perennial roots are the best in the spring, just before the period when the sap begins to rise.

Juicy roots, if their medicinal portion be not volatile, may be rapidly dried by a heat from 90 to 120 degrees—but if aromatic, in a current of cold dry air, and exposed to the sun. Thick roots should be sliced and hung on strings.

Herbs and leaves in general acquire activity from their age—but mucilaginous ones become woody. Particular attention should be bestowed on collecting the fetid hellebore or bear's foot, and fox glove; the former has the leaves of the first and second year at the same time, distinguished by their colour and their acrimony; it is necessary, therefore, to select one kind only, and the older are the more active.

* See Dr. Tissot's advice to the people of Lusanne.

The fox glove is a biennial, and the leaves previous to the flowering of the second year, more active than those of the first; they should if possible, be distinguished. Aromatic leaves should be collected after the flower buds are formed: Annuals, about the time of flowering; biennials, before the sap mounts; and perennials before they flower: they should be dried rapidly, and if succulent, by artificial heat.

Resinous barks are best collected in spring; gum my ones in autumn; and of the former, the heaviest should be preferred.

Flowers, as well as herbs, should be collected in dry weather. Seeds and fruits should be collected when ripe, but before they would fall spontaneously. Vegetables generally should be dried by artificial heat, though not to such a degree as most slightly to destroy their colour. Every vegetable should be kept dry: Herbs and leaves when brittle or friable, appear to have lost their odour, but regain it on being kept in a close box. Oily seeds and fruits should be kept in a dry cool place, but not beyond the season of again collecting them. Those vegetable substances are best preserved in every form which have grown and been gathered in a dry season.

M

Extracts from a Compendious Dictionary of the Veterinary Art.

(Continued from No. 32—p. 254.)

CALVING. At the end of nine lunar months or 40 weeks the period of the cow's gestation is complete: and about a fortnight or three weeks before this time, what is termed Springing takes place. The space then between the shape and the udder becomes redder than usual, the udder enlarges, and the ligaments or joinings of the bones termed the Couples, on each side the rump, are by degrees giving way, till a yielding or something like a separation of them can be felt. When these appearances show themselves, the cow is at her full time, and should be narrowly watched, as she hourly may be expected to calve. Immediately before calving, the animal appears to be uneasy, the tail is elevated, she shifts about from place to place, and is frequently lying down and getting up again; the labour pains then come on, and by the contraction of the womb, the contents are gradually pushed forward. At first the membranes appear beyond the shape like a large bladder of water; this soon bursts, and after the water is discharged, the head and fore-feet of the calf are protruded beyond the shape; the body next appears, and the delivery is soon complete. In a little time afterwards some trifling pains take place, which separate the after-birth or cleansings, and then the process is finished. Such is the usual course of what may be termed a natural calving, and the time of it seldom exceeds two hours in the whole; sometimes, however, it is protracted to five or six, or even longer. When the water bladder breaks early in calving, and before the mouth of the womb is sufficiently expanded, the process is often slow, and it is a considerable time before any part of the calf makes its appearance. In such cases Mr. Skerret thinks it necessary to assist nature by introducing the arm into the uterus, and laying hold of the fore legs, to bring them gradually, as the pains occur into the passage, by which means the delivery is soon accomplished: he observes, however, that such interference should be carefully avoided, until it appears absolutely necessary. He strongly reprobates the practice of driving the animal about when symptoms of calving appear: which

proceeds from an erroneous opinion, that the process will thereby be facilitated; he has known many instances of its having proved fatal. It happens more frequently with the cow than any other quadruped, that the calf, instead of presenting in the usual way, that is, with the head and fore-feet, is so situated in the uterus, that delivery is rendered difficult and sometimes impracticable, without assistance. In such cases, it becomes necessary to introduce the hand, and change the position of the calf. When, for example, the head presents without the fore-legs, which are bent under the breast; it cannot in this position be drawn away without endangering the animal's life. In this case, the calf is to be gently pushed back into the uterus, so as to admit of the fore-legs being drawn gradually and carefully out into the vagina. It may be necessary then, particularly when the calf is unusually large, or when the passage of the cow is comparatively small, as is sometimes the case the first time of calving; to place cords round the feet and under-jaw, and, whenever the pains occur, to assist nature in gradually extracting the calf. On some occasions, considerable force has been found necessary for this purpose, and no ill consequence has ensued from it; but it should be recollecting, that nature is never to be interfered with in the process of delivery, unless it is first clearly ascertained that assistance is absolutely necessary. The preternatural positions of the calf, which at times occur, are various, and have been well described by Mr. Skerret in his Treatise on the Parturition of the Cow, &c.

CALVES Diseases of. The principal diseases of calves are diarrhoea or scouring, and costiveness. The former should not be hastily interfered with; it is often a salutary evacuation, but when it becomes violent, or continues longer than a day or two, some means must be employed for checking it. The most simple remedy should be first tried; such as gruel made with wheat flour or arrow-root, with two or three drams of prepared chalk twice or three times a day. If this fail, add to the chalk two drams of tincture of opium, a dram of ginger, and four ounces of peppermint water. In obstinate cases two or three drams of catechu may also be given; and the dose of tincture of opium increased. Glauber's salt and castor oil are the best remedies for costiveness; the dose of each is from six to eight ounces, if given separately; if joined, about four of each.

[To be continued.]

FOR THE AMERICAN FARMER.

Domestic Industry.

No. VIII.

Mr. Skinner.—We are frequently told that commerce will regulate itself. It is very true; and so will the yellow fever, and the plague, regulate themselves. As soon as these scourges of the human family have destroyed all that come within their sphere of influence, they will cease to destroy. In like manner when a ruinous commerce has produced bankruptcy, as far as its influence has extended, it will cease also. But this is like the physician curing all ills, by stopping

the motion; or rather, like submitting the cure of disease to death himself, instead of applying a judicious remedy, before it has injured the constitution. Woful experience has proved that merchants, as well as gamblers, will pursue a losing trade, in hopes of a change of fortune, until their all is gone. Nor will they even stop then, if they can avoid it: but follow on in the same course till their friends and connexions are involved in one common ruin. But if commerce will regulate itself, why are such sums of money lavished for that purpose? Let any one who can, add up the millions of dollars, that have been expended from the year 1796, to the present time, on our navy, on ambassadors, plenipotentiaries, envoys, outfit, consuls, and agents; and to these add the expense of the last war; for all these were to regulate commerce, and he will perceive that it has been the most expensive of all our regulations. Had one-tenth of these sums been appropriated to the encouragement of domestic industry, both our home and foreign trade would, at this time have been in a very different condition. Foreign markets would have been less glutted with the produce of our soil, our warehouses, and stores, emptier of foreign manufactures, our country possessed of more specie and less debt, we would now have had a great many more persons working, and far fewer, wanting.

The truth however is, that as long as any one maritime nation undertakes to regulate its commerce, every other nation, regardful of its interest, must do the same. To be convinced of this, let some of our advocates for unlimited trade, send a few bales of our manufactures, some cotton twist, some hats, boots, or shoes, to London, or Liverpool, and they will soon be informed how trade is there suffered to regulate itself. They will also learn, that the maxim of buying wherever the article can be had cheapest, is not adopted in the country from which it emanated: that on the contrary, the rule there is:—You shall buy nothing abroad for home consumption, that can be made at home.—And they will give you a very good reason for it, namely, our population must be supported, and we may as well support it for working, as for going idle. Indeed the basis on which all commercial regulations ought to be established, is that those regulations shall have the greatest possible tendency to promote domestic industry. For as this is the real source of national wealth whatever promotes it, ought to be encouraged, whatever has a tendency to injure it, ought to be restrained.

We have unfortunately subverted this rule and made every thing subservient to commerce. The consequence is, that, like a spoiled child, it has not only injured itself, but also, agriculture, the parent by which it was indulged. It is now to be hoped that the parent has learned wisdom from experi-

ence, and will in future lay some more salutary restraints upon its headstrong offspring.
Yours, &c. COGITATIVUS.

FOR THE AMERICAN FARMER.

Premiums offered by the Agricultural Society of Albemarle, at their Meeting, Nov. 1, 1819.

1st. A premium of 30 dollars for the greatest production and best quality of winter wheat from not less than two acres in one piece.

2d. A premium of 20 dollars for the next greatest production, from the same number of acres.

3d. A premium of 30 dollars for the greatest production and best quality of Indian corn from the same number of acres.—Upon high land.

4th. A premium of 20 dollars for the next greatest production from the same number of acres.

5th. A premium of 50 dollars for the best method of recovering worn out lands, to a more hearty condition—within the power of farmers in general, by judicious culture and the application of common and cheap materials as manure, founded on experiment, made upon at least two acres.

6th. A premium of 40 dollars for the second best method.

The society are persuaded that every system of Husbandry must necessarily, if judicious, conform to the circumstances of the country in which it is adopted. These circumstances are, its climate, its soil, the kind of labour employed, its products, the reward for such products, &c. A grazing country for example—will be most interested in discovering the cheapest and most productive method of growing and fattening stock, the improvement of their breed, &c. whilst in this section of country, where the valuable grain of wheat and Indian corn constitute the staple productions, such a system of cultivation as will enlarge their products, ought to claim the first consideration. Intimately, and indeed indissolubly connected with this interesting subject, is the reclamation of our exhausted fields; the result of the deteriorating system of our ancestors, and of which the present generation is far from being guiltless.

It is therefore to the encouragement of these objects that the society first proposed to apply its funds; and as these shall increase it will be enabled to widen the sphere of its patronage till it embraces the whole circle of Agriculture. Regulations concerning the foregoing premiums.

The premiums as above proposed shall be awarded, on the crops of the year 1821. Those for wheat in the autumnal session of that year, and those for Indian corn in the ensuing spring session. Those for the reclamation of land, in the session of the autumn of 1822.

Persons desirous of becoming candidates for premiums on crops, must give notice hereof by letter, (post paid) or by personal application to the Secretary, on or before the 1st of September, 1821, as it regards wheat, and on or before the 1st of April, 1822, as it regards corn; stating in writing their names, residence, description of the crop raised, and the object offered for premium.

Also the nature and quality of the soil on which the crop has been raised, the produce, the manner of cultivation, the quantity and kind of manure (if any) used the preceding year. The quantity and kind of manure used the year of its production, the quantity and kind of seed sown, or planted and the time and manner of preparing it, the time and manner of sowing or planting, and of harvesting.

It is understood that the several kinds of grain must be raised on old improved land. The products to be ascertained by the certificate of two respectable and disinterested witnesses. Candidates for premiums, for the reclamation of worn out land, must state also in writing, the nature and quality of the soil, the degree of exhaustion, the kind and quantity of manure (if any applied) and the result of such application, on or before the first of Sep. 1822.

None but the members of the society shall be candidates for premiums—

All premiums shall be paid in silver plate with proper inscriptions.

But the society reserves to itself the right of withholding the proposed premiums, in any case where their appears no peculiar merit.

P. MINOR, Sec'y.

Nov. 1, 1819.

For the American Farmer.

RUTA BAGA—CULTURE.

MR. SKINNER,

Dear Sir—I would thank you by informing the public through your truly valuable paper, that there is at my store, some excellent Ruta Baga or Swedish turnip, which exceed in size, solidity, &c. any I have seen in this country or Europe: leaves and bulb averaged over twelve pounds each. These turnips were grown by Mr. Stephen Biddle, of Dorchester county, eastern shore of Maryland, and notwithstanding the dryness of the

season I understand Mr. B. has a large good crop, which will amply compensate him for any trouble which he might have had, by the increased quantity and quality of his butter, and the rapid improvement of his cows and hogs fed on them.

From the very general and profitable use of the Ruta Baga in Europe, I fear our American farmers pay too little attention to the growth of this valuable vegetable. To speak of Mr. Biddle's abilities as a practical farmer would be superfluous, as he is well known to many of our agriculturists; would to God we had one thousand such men in the

state of Maryland, then indeed, our sister states would not bear away all the agricultural laurels.

I am with respect,
JOSEPH P. CASEY,
No. 2, Hanover street.
Baltimore, Nov. 15, 1819.

Note by the editor of the American Farmer.

Mr. Biddle's success, notwithstanding the uncommon drought, must be attributed to extraordinary care and attention, and goes to corroborate his character as a skilful and judicious cultivator of the soil. A few turnips from the same farm, in Dorchester county, have been sent to the editor's office, and far excel in size, any he has before seen. They measure two feet round, and we are assured, were not the largest that were gathered.

Occasional Extracts.

MR. SKINNER—Whilst I was in Ohio, I had the happiness to see the Steubenville cloth manufactory, and to be known to Mr. Dickinson, of that place, who is part owner of the manufactory, and who owns a flock of seven hundred of the most beautiful merino sheep in the world. The manufactory is great and I think splendid. I saw fine cloth weaving, and afterwards saw it dressing, made from the wool of the sheep which I had seen. I engaged a few yards of it, brought it home—have a coat now making for myself and for my son and daughter, who will call on you shortly, on their way to Cecil. I send you 2 1-8 yards of the same cloth which I ask you to accept, as a proof that you were not forgotten by me, when the mountains separated us. I however make a condition, that unless you will be proud to show on your back such a sample of home manufacture, you are not at liberty to keep it. My belief is, that if I have ever seen as good imported, I certainly never saw any superior. The Steubenville manufactory is in full operation, making cloths of various prices. I bought some for a great coat at four dollars and some cents the yard, which I think is better and more beautiful than imported cloth, which is sold in our shops at six or seven dollars the yard.

The glass manufactory of Pittsburg, which I visited furnishes glass superior to any that I have ever seen imported from England, and assuredly at less price. The fine cutting, polishing, and engraving, surpass in execution, all I have ever seen. My good sir, are these things true, and do we purchase imported

cloth and glass, and a hundred other things imported, which we could have better made at home? These things ought not to be so—it is time that we assume the attitude of an independent nation—we send to foreigners almost our heart's blood to pay for things we can and do make better at home—many of our surplus products they want but little of

and care less for, then why do we not create a market at home for our surplus bread, by encouraging the manufacturers of our own country; and in return, their labourers will eat our bread.

THE FARMER.

BALTIMORE, FRIDAY, NOVEMBER 19, 1819.

Proceedings of the Agricultural Society of Albemarle Virginia.

In Number 33, page 262, we published the *rules and regulations of the agricultural society* of Albemarle, Virginia.

At that time we did not know the date of its organization, which was the 7th of October, 1817. Nor had we then been furnished with the following lists of *officers*, elected October, 1819, to serve one year.

JAMES MADISON, President,
TH. M. RANDOLPH, Vice Presidents.
JAMES BARBOUR, JOHN COLES, Treasurer,
PETER MINOR, Secretary.
TH. W. MAURAY, Assistant Secretary.

Corresponding Committee.

T. M. RANDOLPH,
JAMES BARBOUR,
PETER MINOR,
T. G. WATKINS,
W. D. MERRIWETHER.

The Society has done us the honour of making the *American Farmer* its organ of Publication—As we have been politely informed by the following extract of a letter from Mr. Minor, the Secretary—In recording this extract it would be affectation, not to say ingratitude, were we not to acknowledge, that we feel highly gratified that our humble toils should have already attracted the favourable notice and patronage of citizens distinguished alike by their public spirit and public services.

Extract of a letter from Peter Minor, Esq. Secretary of the Agricultural Society of Albemarle, Va. to J. S. Skinner, Editor of the Am. Farmer, Baltimore.

"The society came to the resolution of making the *American Farmer* the medium of communicating its transactions to the public. In consequence of this resolution, I now forward you an extract from the latest proceedings, with a request, that they may be published. The society have on file, some interesting memoirs, which will also be forwarded as soon as the corresponding committee make the selection and the copies can be made out."

Present Prices of Country produce in this Market.

Actual sales of white and red Wheat—On the 16th inst. from Talbot, White at \$1 25—Red \$1 12½—17th, at \$1 11—18th, \$1 10—Present Quotation, for Red Wheat, \$1 10 to \$1 12—Corn 60 cents—Rye, 60 cents—Oats, 45 to 50 cents—Flour from the wagons, \$5 75 to \$5 87½ Whiskey, 38 to 40 cents. Corn Meal, in the Market, \$2 per 112 pounds—Retail, 12 pounds for 25 cents—Chopped Rye, \$2 per bushel—Hay, 16 dol. a 18 dol. per ton—Straw, 10 dol. a

12 dol.—Tobacco, four hds, sold the present week, for 8 dol. and 10 dol.—Do 4 hds. at 9 dol. a 11 dol.—Do 9 hds. at 11 dol. and 13, all from Calvert county. The eight hogsheads quoted in our last, as having been sold by Mr. L. Wilson, from Calvert county, for 8 dol. a 10 dol. should have been 8 dol. a 10 dol. 50 cents. Tar, 3 dol. per barrel. Turpentine, 2 dol. Pitch, 2 dol. Rosin, 2 dol. Spirits Turpentine, 45 cents per gallon. Cotton Upland, 17 a 20 cents. Beans (white) 1 dol. 20 cents per bushel. Peas, (black eye) 80 cents. Lard, 14 a 15 cents per lb. Bacon 13 a 14 cents. Flaxseed, 1 dol. 50 per bushel. Pork, 13 dol. a 15 dol. per barrel.

FROM BOARDLEY'S HUSBANDRY.

I. A Mess, according to Dr. Johnson.

Beef 1 lb. potatoes 2lb. Scotch barley $\frac{1}{2}$ lb. onions 1-3 lb. pepper and salt. Bacon 3 ounces. Cost 10 cents. This, says Doctor Johnson, would be a dinner and supper for three men; better than the common messes of fat bacon and cabbage, with which bread and beer are required. If one such man eats a pound of bacon at nine pence sterling for his dinner and supper, that article alone is equal to what might support three men; independent of bread and beer. Cost, 33 mills a man, or 3 cents 3 mills.

II. Mess. Dr. Johnson.

The head of a sheep, barley 1-2lb. potatoes 3lb. onions 1-2lb. pepper and salt, cabbage, turnips, carrots. Water 11 pints, Cost 16 cents. Produce 6 quarts.

This was preferred to the other, for richness of flavour and taste; owing to the bones in the head which were broken small before they were put in the stewpan. It makes a most comfortable dinner for four men. Cost 40 mills or 4 cents a meal.

III. Mess. Dr. Johnson.

Bacon $\frac{1}{2}$ lb. barley $\frac{1}{2}$ lb. onions, pepper and salt. Cost 9 cents. A dinner for three men, needing no bread.

IV. Mess. Dr. Johnson.

An ox cheek, barley 1 lb. potatoes 6lb. pepper and salt, onions 1 lb. Cabbage, turnips, carrots, Water 22 pints. Cost 30 cents. Produce 3 gallons. A meal 18.7 mills or 1 cent 8 7-10m.

This costs 30 cents, without bacon; and gives three gallons of very excellent pottage, for 8 men at dinner and supper (perhaps even for 10 men.) It is rich, and better than my other pottages. Ox cheek seems to have the preference to the coarse pieces of beef commonly chosen. In all the above cookery, says Dr. Johnson, a very close stew-pan used, which emitted scarcely any evaporation; a material circumstance. He adds: These dishes are not meant to be continual; but to be three or four days in the week.

V. MESS. Dr. Johnson.

A shin of beef, barley 1 lb. onions 1 lb. potatoes 6 lb. Cabbage, carrots, turnips, salt and pepper. Water 11 quarts. Cost 28 cents. Produce three gallons. Dinner for 7 men. Cost 40 mills, or 4.0 cents a man.

VI. MESS. Dr. Johnson.

Ox's head $\frac{1}{2}$, barley $\frac{1}{2}$ lb. onions $\frac{1}{2}$ lb. potatoes 3 lb. Cabbage, carrots, turnips. Salt and pepper. Water 5 1-2 qts. Produce 6 quarts. Cost 16 cents. A rich and high flavoured pottage. In the last two above trials, the doctor omitted the

bacon; because the flavour of it, in some other instances, was too predominant; and it is a needless expense. On the whole of his trials, he found that ox cheek or shin beef are preferable to any pieces that are without bones. See *Prison Diet.*

POMPION DIET. Dr. Lettsom.

The sort common at the tables of the people of Massachusetts, are distinguished by the name of "the winter, or long neck squash." They weigh 10 to 15 lb. This squash is boiled about half an hour; then mashed up with flour or dough. They make "bread puddings, and most excellent pancakes; by mixing certain proportions of this vegetable, previously boiled, with flour. But most commonly, they are eaten stewed, the skin being first taken off, and the entrails taken out. It is almost a standing dish at their tables; even amongst the most opulent."

General Cautions in Country Cookery.

Soups are never to be filled up or have even a drop of water, hot nor cold, added; and are never to boil briskly. They are to be long, very long over the fire, simmering rather than boiling. And all soups having roots or herbs, are to have the meat laid on the bottom of the pan, with a good lump of butter. The herbs and roots being cut small are laid on the meat. It is then covered close and set on a very slow fire. This draws out all the virtue of the roots and herbs, and turns out a good gravy, with a fine flavour, from what it would be if the water was put in at first. When the gravy is almost dried up, then fill the pan with water; and when it begins to boil, take off the fat.—Never boil fish; but only simmer, till enough.—Beef quick boiled, is thereby hardened; simmer or slow boil it, in not too much water.—Veal and poultry are to be dusted with flour, and put into the kettle in cold water. Cover and boil slow as possible, skimming the water clean. It is the worst of faults, to boil any meat fast.—In baking pies, a quick oven well closed, prevents falling of the crust.

Wasteful or indolent people overlook calculation; and too many may think but little of the wholesome and nourishing qualities of food. But here are well informed and most actively good men, recommending to the world the results of much inquiry and experience therein. However lightly may be thought of a cent on a single meal of victuals, when the sum of a year's meals is calculated, for a person, a family, and a nation, it becomes striking and important. A cent for a meal, amounts to three cents a day.

Dollars.

One person at 3 cents a day, saves in the year - - - - - 11
One family of 5 persons - - - - - 55
A nation of 5 millions of people 55,000,000

The cent thus saved by the good house wife, on every plentiful meal of the wholesomest food, would be sufficient for maintaining the most desperate war by the freemen of America, in defence of their country, against the wiles and the violences of the great enlightened world!

PRINTED EVERY FRIDAY,

FOR

JOHN S. SKINNER,
BALTIMORE.